

What is claimed is:

[Claim 1] 1. A method of encoding audio-visual information comprising:
preparing audio information having a plurality of bytes;
preparing video information having a plurality of bytes;
configuring at least one synchronization field in the audio information to form at least one synchronization-audio packet (SAP), each of the at least one SAP having at least one byte of the audio information;
configuring at least one control field in the audio information to form at least one control-audio packet (CAP), each of the at least one CAP having at least one byte of the audio information;
configuring at least one video field and merging both of the audio information and the video information to form at least one video-audio packet (VAP), each of the at least one VAP having at least one byte of the audio information; and
combining the at least one SAP, the at least one CAP, and the at least one VAP to form at least one universal audio-video frame (UAVF).

[Claim 2] 2. The method according to claim 1, wherein:
the at least one synchronization field stores at least one synchronization data for marking a start of the at least one UAVF.

[Claim 3] 3. The method according to claim 1, wherein:
the at least one control field stores at least one control data for reproducing the video information.

[Claim 4] 4. The method according to claim 1, wherein:
for each of the at least one SAP, the at least one byte of the audio information is arranged behind the at least one synchronization field;
for each of the at least one CAP, the at least one byte of the audio information is arranged behind the at least one control field; and

for each of the at least one VAP, the at least one byte of the audio information is arranged behind the at least one video field.

[Claim 5] 5. The method according to claim 1, wherein:

each of the at least one synchronization field stores at least nine bytes of data;
each of the at least one control field stores at least nine bytes of data; and
each of the at least one video field stores at least nine bytes of data.

[Claim 6] 6. The method according to claim 1, wherein:

each of the at least one control field stores nine binary codes of E1, 81, C7, E1, 81, C7, E1, 81, and C7.

[Claim 7] 7. The method according to claim 1, further comprising:

recording the at least one UAVF in a recording medium.

[Claim 8] 8. The method according to claim 7, wherein:

the recording medium is a compact disk-digital audio (CD-DA) with a diameter of 108 mm.

[Claim 9] 9. A recording medium for audio-visual information comprising:

plural bytes of audio information, recorded in the recording medium, for playing back as sound;

plural bytes of video information, recorded in the recording medium, for reproducing as image;

at least one synchronization-audio packet (SAP), recorded in the recording medium, each of the at least one SAP having a synchronization field and a first audio field, in which the first audio field stores at least one byte of the audio information;

at least one control-audio packet (CAP), recorded in the recording medium, each of the at least one CAP having a control field and a second audio field, in

which the second audio field stores at least one byte of the audio information;
and
at least one video-audio packet (VAP), recorded in the recording medium, each
of the at least one VAP having a video field and a third audio field, in which the
third audio field stores at least one byte of the audio information, thereby:
combining the at least one SAP, the at least one CAP, and the at least one VAP
to form the at least one UAVF.

[Claim 10] 10. The recording medium according to claim 9, wherein:
the synchronization field stores at least one synchronization data for marking
a start of the at least one UAVF.

[Claim 11] 11. The recording medium according to claim 9, wherein:
the control field stores at least one control data for reproducing the video
information.

[Claim 12] 12. The recording medium according to claim 9, wherein:
the first audio field is arranged behind the synchronization field;
the second audio field is arranged behind the control field; and
the third audio field is arranged behind the video field.

[Claim 13] 13. The recording medium according to claim 9, wherein:
the synchronization field stores at least nine bytes of data;
the control field stores at least nine bytes of data; and
the video field stores at least nine bytes of data.

[Claim 14] 14. The recording medium according to claim 9, wherein:
the synchronization field stores nine binary codes of E1, 81, C7, E1, 81, C7,
E1, 81, and C7.

[Claim 15] 15. The recording medium according to claim 9, wherein:
the recording medium is a compact disk–digital audio (CD–DA) with a diameter of 108 mm.

[Claim 16] 16. A method of decoding audio–visual information formatted by at least one universal audio–video frame (UAVF) having at least one synchronization–audio packet (SAP), at least one control–audio packet (CAP), and at least one video–audio packet (VAP), the method comprising:
detecting data stored in a synchronization field of the at least one SAP for determining a start of the at least one UAVF;
accessing a first portion of the audio information from the at least one SAP;
detecting data stored in a control field of the at least one CAP;
accessing a second portion of the audio information from the at least one CAP;
accessing the video information stored in a video field of the at least one VAP;
accessing a third portion of the audio information from the at least one VAP;
reproducing the video information stored in the video field in response to the data stored in the control field; and
playing back the first to third portions of the audio information.

[Claim 17] 17. The method according to claim 16, wherein:
for each of the at least one SAP, the first portion of the audio information is arranged behind the synchronization field;
for each of the at least one CAP, the second portion of the audio information is arranged behind the control field; and
for each of the at least one VAP, the third portion of the audio information is arranged behind the video field.

[Claim 18] 18. The method according to claim 16, wherein:
the synchronization field stores at least nine bytes of data;
the control field stores at least nine bytes of data; and
the video field stores at least nine bytes of data.

[Claim 19] 19. The method according to claim 16, wherein:

the synchronization field stores nine binary codes of E1, 81, C7, E1, 81, C7, E1, 81, and C7.

[Claim 20] 20. The method according to claim 16, wherein:

the at least one UAVF is recorded in a compact disk-digital audio (CD-DA) with a diameter of 108 mm.